

The Research Base of Audio-facilitated Reading

The benefits of audio-facilitated reading have been documented over several decades by a number of researchers and teachers. They describe the advantages of providing audio support for struggling and reluctant readers, English language learners, and learning-disabled students.

Research on repeated reading and listening to text began in the early 1970s. Chomsky (1976) implemented an audiotaped reading system with five eight-year-old students who were all reading one or two years below their grade level. Over the course of 10 months, the students' fluency and reading comprehension improved. Chomsky also noted that "passivity about reading declined dramatically, confidence increased, and they began to pick up new books of their own choosing." (page 296)

Blum et al. (1995) explored the benefits of increasing first-grade ELL students' access to books and giving them the opportunity to practise reading with audiotapes at home. The study found that when second-language learners were given the opportunity to reread books with audiotapes at home, they showed a substantially improved ability to read increasingly difficult books both fluently and accurately. Teachers and parents also reported that these students read more and demonstrated an increased confidence and independence in literacy activities.

In a larger study with 162 first-grade ELL and non-ELL students, Koskinen et al. (2000) also found that ELL students benefited from having access to an audio model. The students reread books at home daily with audio support. Parents reported positive effects on their children's reading motivation and achievement and became more involved in literacy activities.

Carbo (1978) noticed substantial gains in word recognition and oral reading skills when using "talking books" with eight learning-disabled students. "With talking books, students can experience immediate success ... Not only have all the youngsters made excellent gains in reading compared to previous performance, but they have become more interested in reading, more willing to try, and more helpful toward one another." (page 273)



The Center for the Improvement of Early Reading Achievement analysed a number of studies on the effectiveness of repeated reading and assisted reading in improving students' reading fluency (Kuhn and Stahl, 2000). Assisted readings involved the student's repeated reading of a text with a model of fluent reading, such as an audiobook, to provide support. The authors found clear improvements in oral reading and comprehension. They also found that both repeated and assisted readings "enable children to read more difficult material than they might otherwise be able to read, or may provide a manageable structure to enable increased amounts of reading." (page 24)

Put Reading First (2001) has also endorsed this approach. "Researchers have found several effective techniques related to repeated oral reading: students read and reread a text a certain number of times or until a certain level of fluency is reached ... and oral reading practice is increased through the use of audiotapes, tutors, peer guidance, or other means." (page 24)

The effectiveness of Rainbow Reading, the New Zealand programme on which New Heights is closely based, has been demonstrated in several research studies. In both reading programmes, the audio-facilitated reading experience is enhanced by including other well-known, successful procedures. Among these are orientation to the book, grading the reading material (which is short and of high interest), repeated readings, independent practice, and conferencing. Pluck (1995) found that 43 underachieving students, ranging in age from seven to 12 years, made average gains of 26 months in their reading level in seven months of half-hour daily lessons on the Rainbow Reading programme.

In another study using the Rainbow Reading programme, Langford (2001) reported that 15 students, ranging in age from 12 to 17 years,

13 of whom were from non-English-speaking backgrounds, made average gains of 14 months in their reading level during two months on the programme.

Nalder and Elley (2002) researched the effectiveness of Rainbow Reading with 29 students ranging in age from seven to 12 years. Fourteen of the students were from non-English-speaking backgrounds. The authors found the students made, on average, gains in their reading level of 26 months in four and half months on the programme. The struggling readers and ELL students made similar gains in reading level, but the ELL students progressed faster on the other literacy measures. The figures below illustrate the gains.

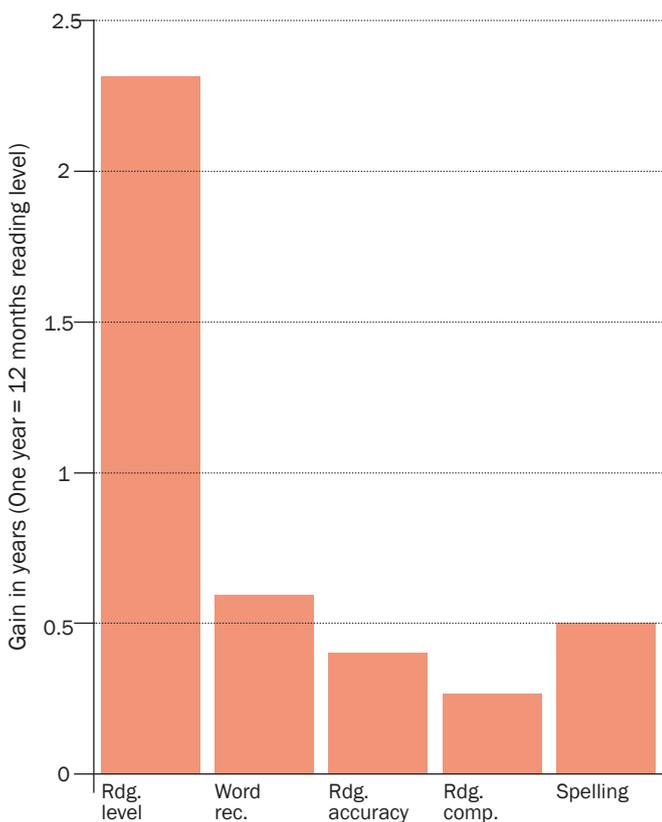


Figure 1: Progress made by struggling readers on five literacy measures over four and a half months

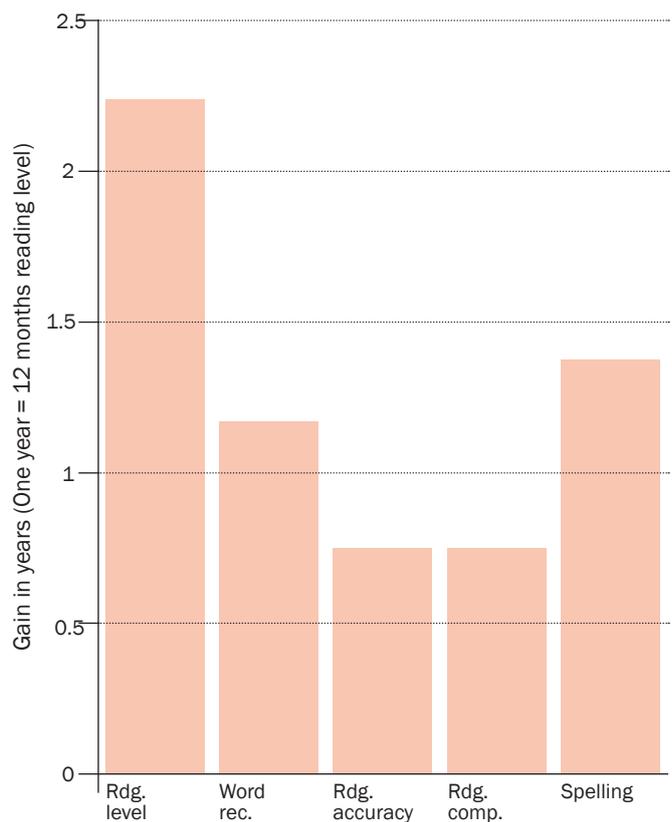


Figure 2: Progress made by ELL students on five literacy measures over four and a half months

The Research Base of the New Heights Programme

Methodology/Delivery	Pedagogy/Research
Student is orientated to new book.	Orientation to the book is an extremely effective means of activating prior knowledge, fostering interest, helping students to predict what they may read about, and facilitating a better understanding of reading. ¹
Student listens to audio support and follows along.	Independent reading supports fluency. Audio support provides students with valuable self-controlled access to a good, fluent model, which when read at a suitable speed allows them to follow the text. For struggling readers, the use of audio support is very beneficial as it is supportive, private, and non-threatening. ² Using models of fluent reading, such as a reading pen, to assist students with repeated reading of text has a positive effect on students' oral reading and comprehension. ³ Listening to an expert reader helps students who struggle with word identification or who are slow comprehenders to build vocabulary, fluency, and meaning. ⁴
Student fills in Student Handbook.	Students who take responsibility for their own record keeping and learning are more likely to become active learners and better readers more quickly. Teachers who have ready access to information on how much practice students require before achieving competency can make informed decisions about what their students need to make maximum gains quickly. ⁵ Students with reading delay need to be meaningfully engaged at all times to ensure maximum acceleration in reading skills.
Student reads book independently and makes a decision ...	Students who monitor their own skills, proficiency, and possible readiness for promotion are becoming active learners and are acquiring the skills needed to become competent readers. ⁶
<ul style="list-style-type: none"> • Do I need more practice? 	Repeated practice of the same text is important for the orchestration and consolidation of skills. ⁷ Repeated practice results in higher levels of accuracy, better fluency, and improved comprehension of reading. ⁸ Reading a book competently is proof to a student that success is achievable, and this sets a precedent for future successful reading.
<ul style="list-style-type: none"> • Should I do an activity? 	The most effective reading activities are text-related, meaningful, integrated with writing, and involve reading. ⁹ They provide further practice in reading as well as variety and an opportunity for consolidation.
<ul style="list-style-type: none"> • Should I conference with my tutor? Student reads part of the book to the tutor, who listens, praises, pauses, prompts, checks fluency and comprehension, focuses on some teaching points, gives positive oral and written feedback, then recommends ... 	Regular, positive, appropriate feedback is essential to the acceleration of reading skills. ¹⁰

The Research Base of the New Heights Programme

Methodology/Delivery	Pedagogy/Research
more practice with the same book ...	Repeated readings of sentences and passages are found to produce a marked improvement in students' word recognition, fluency, and comprehension. When readers are asked to undertake repeated readings in unison with an expressive model, marked improvements in their own phrasing are found. ¹¹
practice with a new book at the same level.	Repeated readings and assisted readings may enable students to read more difficult material than they might otherwise have been able to read, or they may provide a manageable structure to enable increased amounts of reading. ¹²
Teacher assesses whether student is ready for the next level. If student reads unseen book at current level with <95% accuracy or at the next level with <88–90% accuracy, they stay at the current level and practise with a new book at the same level. If student reads unseen book at current level with >95% accuracy or at the next level with >88-90% accuracy, they are promoted to the next level and practise with a new book at the new level.	Students learn best with the correct degree and balance of support and challenge, that is, reading books at their individual instructional reading level. ¹³
Student takes home book, audio support, and/or activity, as appropriate, with guidelines for parents.	Where there is consistency of practices between home and school, acceleration of reading progress is more likely to result. ¹⁴

References

- Clay, M. M. (1993). *Reading Recovery: A Guidebook for Teachers in Training*. Auckland: Heinemann.
- Hudson, R. F., Lane, H. B., and Pullen, P. C. (2005). "Reading Fluency Assessment and Instruction: What, Why, and How?" *The Reading Teacher*, 58(8), pp. 702–714; Heckelman, R. (1986). "N.I.M. (Neurological Impress Method) Revisited." *Academic Therapy*, 21, pp. 411–420.
- Kuhn, M. (2011). "Fluency: A Review of Developmental and Remedial Practices." In R. L. Allington & A. McGill-Franzen (eds.), *Handbook of Reading Disability Research* (pp. 307–314). New York: Taylor & Francis.
- Valencia, S. W. and Riddle Buly, M. (2004). "Behind Test Scores: What Struggling Readers Really Need." *The Reading Teacher*, 57(6), pp. 520–533.
- Reutzel, D. R. and Cooter, R. B., Jr. (2011). *Strategies for Reading Assessment and Instruction: Helping Every Child to Succeed*. (4th ed.). Boston: Allyn & Bacon.
- Guthrie, J. Y. (Ed.). (2008). *Engaging Adolescents in Reading*. Thousand Oaks, CA: Corwin Press.
- Clay, M. M. (1993). *Reading Recovery: A Guidebook for Teachers in Training*. Auckland: Heinemann; Kuhn, M. (2011). "Fluency: A Review of Developmental and Remedial Practices." In R. L. Allington & A. McGill-Franzen (eds.), *Handbook of Reading Disability Research* (pp. 307–314). New York: Taylor & Francis.
- Samuels, S. J. (1997). "The Method of Repeated Readings." *The Reading Teacher*, pp. 376–381.
- Kuhn, M. (2011). "Fluency: A Review of Developmental and Remedial Practices." In R. L. Allington & A. McGill-Franzen (eds.), *Handbook of Reading Disability Research* (pp. 307–314). New York: Taylor & Francis.
- Bircham, A., Shaw, M., and Robertson, A. (1997). "Enhancing Reading Development Using Audio-Taped Books." *Educational Psychology in Practice*, 13(3), pp. 181–187.
- Tierney, R. J. and Shanahan, T. (1991). "Research on the Reading-Writing Relationship: Interactions, Transactions, and Outcomes." In R. Barr, M. Kamil, P. Mosenthal, & P. Pearson (eds.), *Handbook of Reading Research*, vol. 2, White Plains, NY: Longman.
- Hattie, J. and Timperley, H. (2007). "The Power of Feedback." *Review of Educational Research*, 77(1), pp. 81–112.
- Samuels, S. J. (2006) "Toward a Model of Reading Fluency." In S. Samuels & A.E Farstrup (eds.), *What Research Has to Say About Reading Fluency* (3rd ed., pp. 24–46). Newark, DE: International Reading Association; Rasinski, T., Blachowicz, C., and Lems, K. (eds.) (2012). *Fluency Instruction: Research-based Best Practices*. (2nd ed., p.176). New York, NY: Guildford.
- Clay, M. M. and Cazden, C. B. (1999). "A Vygotskian Interpretation of Reading Recovery." *Lev Vygotsky: Critical Assessments*, 3, pp. 354–370.
- Menon, A. and Hiebert, E. H. (2011). "Instructional Texts and the Fluency of Learning Disabled Readers." In A. McGill-Franzen & R. L. Allington (eds.), *Handbook of Reading Disability Research* (pp. 57–67). New York: Routledge.
- Rasinski, T. and Stevenson, B. (2005). "The Effects of Fast Start Reading: A Fluency-Based Home Involvement Reading Programme, on the Reading Achievement of Beginning Readers." *Reading Psychology: an International Quarterly*, 26, pp. 109–125.